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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,647	01/26/2005	Jacek Kruszynski	W&L Case 101	7501
23474	7590	01/25/2006	EXAMINER	
FLYNN THIEL BOUTELL & TANIS, P.C. 2026 RAMBLING ROAD KALAMAZOO, MI 49008-1631			ABDELWAHED, ALI F	
			ART UNIT	PAPER NUMBER
			3722	
DATE MAILED: 01/25/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/522,647	<b>Applicant(s)</b> KRUSZYNSKI ET AL.	
	<b>Examiner</b> Ali Abdelwahed	<b>Art Unit</b> 3722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/26/05</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Specification***

The abstract of the disclosure is objected to because it exceeds the 150 word limit and contains legal phraseology such as: "said". Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### ***Claim Objections***

Claim 6 is objected to because of the following informalities:

It is suggested that in:

Claim 6, line 3, before "...inner insert corner..." delete "the" and insert --an--.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,039,515 to Lamberg in view of U.S. Patent No. 4,558,975 to Hale.

Lamberg discloses a solid drill bit (10) for machine tools with a bit body (11) and at least two indexable inserts (16, 17) that are rectangular or square in contour having four main cutting edges of the same length (see figs.1, 3). Each arranged at a radial distance from one another and in an insert seat in the bit body (see figs.1, 2) in the region of a chip flute (14, 15). The inserts project with their front-end main cutting edges (26) axially beyond the bit body (see figs.1, 2), and radially overlap one another in their active regions rendering the front-end main cutting edge of the inner insert ineffective (see figs.1, 2). The radially outer insert projects radially beyond the bit body with its outer insert corner and with its adjoining secondary cutting edge (see fig.1), which is perpendicular to the respective major cutting edge (see fig. 3), and whereby the respective secondary cutting edge is inclined starting out from the cutting edge corner in its longitudinal extent at a defined setting angle ( $\delta$ ) in direction of the bit body (see fig.1), and wherein the setting angle is of  $2^{\circ}$ - $10^{\circ}$  relative to the end face of the drill bit body (see column 2, lines 55-59), which therefore sets the peeling section of the main cutting edge toward the outer insert corner at a positive setting angle of  $72^{\circ}$ - $87^{\circ}$  relative to the end face of the drill bit body.

However, Lamberg fails to teach the working and peeling sections enclosing an angle of  $95^{\circ}$  to  $110^{\circ}$  with one another, the peeling section of the main cutting edge and

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the adjacent secondary cutting edge enclose an angle of  $160^{\circ}$  to  $175^{\circ}$  with one another, and the central section enclosing a sweepback angle of  $160^{\circ}$  to  $175^{\circ}$  with the working section and being set at a negative setting angle of  $3^{\circ}$  to  $18^{\circ}$  relative to the end face of the drill bit body. Nevertheless, Hale teaches a drilling tool (110) having a drill bit body (111) comprising inserts (114, 115) having the working (420) and peeling (429) sections enclosing an angle of  $95^{\circ}$  to  $110^{\circ}$  with one another (see column 3, lines 20-23), the peeling section of the main cutting edge and the adjacent secondary cutting edge (428) enclose an angle of  $160^{\circ}$  to  $175^{\circ}$  with one another (see fig. 4, and column 3, lines 11-13), and the central section (421) enclosing a sweepback angle of  $160^{\circ}$  to  $175^{\circ}$  with the working section (see fig. 4, and column 3, lines 11-13), which therefore sets it at a negative setting angle of  $3^{\circ}$  to  $18^{\circ}$  relative to the end face of the drill bit body.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the tool of Lamberg, in view of Hale, such that it would provide the tool of Lamberg with the concept of having cutting inserts comprising the aforementioned limitations for the purpose of eliminating burrs that are formed in a drilled hole of a workpiece during the drilling operation.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali Abdelwahed whose telephone number is (571) 272-4417. The examiner can normally be reached Monday through Friday from 10:00 A.M. to 6:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502.


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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the examiner or the examiner's supervisor.

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01/20/2006

  
BOYER D. ASHLEY  
SUPERVISORY PATENT EXAMINER